Serial No.: 10/605,340

Confirmation No.: 2339

Applicant: PREIJERT, Stefan et al.

Atty. Ref.: 00173.0038.PCUS00

AMENDMENTS TO THE CLAIMS:

18. (Currently Amended) A method for producing a vehicle axle comprising:

directing a first blank (1) through a furnace (2) and heating the blank (1) to a working

temperature;

directing the first blank (1) between a pair of rollers (3, 4) having profiled surfaces and

thereby performing forming the first blank (1) into an intermediate product having a

predetermined profile along a longitudinal extent thereof;

feeding the first blank (1) to a forging press having a number of cooperating die pads, and

working the first blank (1) to form a substantially finished product having a cross section

substantially in the form of a hat profile of predetermined height, width and material thickness

along a length thereof;

placing in connection with the hat profiled first blank (1), a second blank (14) having

essentially the same profile as the hat profile of the first blank (1) in the dividing plane of the

cooperating die pads; and

joining the first (1) and the second blank (14) together, at least at respective edges

thereof, to form and forming a composite vehicle axle (18).

19. (Currently Amended) The method as recited in claim 18, wherein at least the first blank is

forged vertically with respect to the a principal plane in which the composite vehicle axle (18) is

intended to be used.

20. (Currently Amended) The method as recited in claim 18, wherein the forging operation

comprises a first step in which a pair of first cooperating die pads form the material in the first

blank such that it acquires a predetermined, varying height in a vertical plane along a longitudinal

extent thereof and the first blank further acquires a basic principal shape in the principal plane in

which the composite vehicle axle (18) is intended to be used.

2

Serial No.: 10/605,340

Confirmation No.: 2339

Applicant: PREIJERT, Stefan et al.

Atty. Ref.: 00173.0038.PCUS00

21. (Previously Presented) The method as recited in claim 20, wherein the forging operation

further comprises an additional step in which a pair of second cooperating die pads form the

material in the first blank to a predetermined, varying thickness along a side surface, bottom

surface and upper edge surface of the profile along a longitudinal extent thereof.

22. (Previously Presented) The method as recited in claim 21, wherein the additional step of the

forging operation is repeated at least one time in successive die pads until the first blank has

acquired a final shape.

23. (Currently Amended) The method as recited in claim 18, wherein the second blank is

preformed in one of a separate forging operation and a joint forging operation to have

substantially the same profile as the hat profile of the first blank in a dividing plane of the die pads.

24. (Currently Amended) The method as recited in claim 18claim 23, wherein the first and the

second blanks are formed in a joint forging operation in which the second blank is formed to the

same profile as the hat profile of the first blank in a dividing plane of the die pads.

25. (Currently Amended) The method as recited in claim 18claim 26, wherein the first and the

second blanks are heated in a pair of separate induction furnaces and then placed between a pair

of cooperating die pads in a press and joined together by forge welding.

26. (Currently Amended) The method as recited in claim 18, wherein the first and the second

blank are simultaneously heated using heating means introduced between the first and second

blank, which blanks are held between a pair of cooperating die pads in a press and the first and

second blank are joined together by forge welding.

27. (Currently Amended) The method as recited in claim 26, wherein the heating is effected by

means of one of an-induction elements, an induction furnace, and a gas flame.

3

Serial No.: 10/605,340

Confirmation No.: 2339

Applicant: PREIJERT, Stefan et al.

Atty. Ref.: 00173.0038.PCUS00

28. (Previously Presented) The method as recited in claim 18, further comprising:

cutting flashes along the joined edges of the profile in the same press operation as for

joining together the first and second blank, the profile acquiring a predetermined varying width

along a longitudinal extent thereof.

29. (Previously Presented) The method as recited in claim 18, wherein the vehicle axle comprises

a first section having a cross section substantially taking the form of a hat profile of a

predetermined, varying width, height and material thickness along a length thereof and a second

section having an essentially constant material thickness and being joined together with the first

section along side surfaces of the hat profile.

30. (Previously Presented) The method as recited in claim 29, wherein the vehicle axle is

constructed from a microalloyed steel.

31. (Previously Presented) The method as recited in claim 29, wherein the vehicle axle constitutes

a front axle beam.

32. (Previously Presented) The method as recited in claim 31, wherein a maximum material

thickness of the front axle beam is obtained in connection with fastening points and regions which

are to be subjected to external forces and moments.

33. (Previously Presented) The method as recited in claim 32, wherein the cross section of the

front axle beam has essentially the same outer contours in both the vertical and horizontal planes

as a conventionally forged, solid beam.

4